

The invention in which an exclusive right is claimed is defined by the following:

1. An accessory for use with an existing antenna system of a wireless device to provide an increased range and to control directional characteristics of wireless signals that are transmitted and received thereby, comprising:

(a) a support adapted to be removably coupled to a wireless device at a predefined distance from an existing antenna system thereof; and

(b) a conductive material disposed on the support and extending over an area of sufficient size, so that when the accessory is disposed adjacent to an existing antenna system of a wireless device, the conductive surface serves as a reflector for wireless signals to enhance at least one of a range and directionality of wireless signals transmitted or received by a wireless device.

2. The accessory of Claim 1, wherein the conductive material defines a surface extending over the support.

3. The accessory of Claim 2, wherein the surface defined by the conductive material is generally planar.

4. The accessory of Claim 2, wherein the surface defined by the conductive material is curved in a shape selected so that when the accessory is disposed at the predefined distance from an existing antenna system, wireless signals are directed in a desired pattern by the conductive material.

5. The accessory of Claim 2, wherein the surface defined by the conductive material extends over an area sufficient in size so that the surface is disposed at the predefined distance from a plurality of antennas comprising an existing antenna system of a wireless device.

6. The accessory of Claim 1, further comprising a clip that is sized and shaped so as to couple the accessory to an antenna of a wireless device.

7. The accessory of Claim 6, wherein the clip includes a director disposed on a side of the clip opposite from the support and sized and shaped to direct a wireless signal produced or received by a wireless device.



8. The accessory of Claim 1, further comprising a base that is sized and shaped so as to couple the accessory to a housing of a wireless device.

9. The accessory of Claim 1, further comprising a fixture for hanging the accessory and a wireless device from a vertical surface.

10. The accessory of Claim 1, wherein the predefined distance comprises about a quarter wavelength of a wireless signal produced or received by a wireless device.

11. A method of increasing at least one of a range and a directionality of a wireless device, comprising the steps of:

- (a) providing a conductive surface on a support; and
- (b) removably mounting the conductive surface to the wireless device, at a predefined distance from an existing antenna system of the wireless device, so that when mounted thereon, the conductive surface acts as a reflector of a wireless signal produced or received by the wireless device.

12. The method of Claim 11, further comprising the step of curving the conductive surface in a shape selected so that when the conductive surface is disposed at the predefined distance from the existing antenna system on the wireless device, wireless signals are directed in a desired pattern by the conductive surface.

13. The method of Claim 11, further comprising the step of extending the conductive surface over an area sufficient in size so that the conductive surface is disposed at the predefined distance from a plurality of antennas comprising the existing antenna system of the wireless device.

14. The method of Claim 11, further comprising the step of enabling the conductive surface to mount on and be supported by an antenna comprising the existing antenna system of the wireless device.

15. The method of Claim 11, further comprising the step of enabling a base of the conductive surface to couple with a housing of the wireless device, so that the wireless device is supported thereby.



16. The method of Claim 11, further comprising the step of enabling a support for the conductive surface to be employed to attach the conductive surface and the wireless device to a vertical surface.

17. The method of Claim 11, further comprising the step of including a director for the wireless signals, said director extending beyond an antenna of the existing antenna system and being supported by a clip that attaches one of the conductive surface and the director to the antenna.

18. The method of Claim 11, wherein the predefined distance is equal to about one quarter wavelength of the wireless signal transmitted or received by the wireless device.

19. An accessory for use with an existing antenna system of a wireless device, comprising:

- (a) a conductive surface; and
- (b) a support having means for removably coupling the conductive surface to a wireless device and maintaining the conductive surface at a predefined distance from an existing antenna system of a wireless device, so that a wireless signal transmitted or received by a wireless device is reflected with at least one of an extended range and a desired directional characteristic.

20. The accessory of Claim 19, wherein the conductive surface is curved to focus a wireless signal relative to an existing antenna system of a wireless device.

21. The accessory of Claim 19, wherein the conductive surface is generally planar and extends over an area sufficient to overlap an existing antenna system of a wireless device.

22. The accessory of Claim 19, further comprising a director that extends opposite the conductive surface, said accessory be supported by a clip that is coupled to an antenna comprising an existing antenna system of a wireless device, said director providing at least one of an increased gain and a desired directional characteristic for a wireless signal produced by a wireless device.



23. The accessory of Claim 19, wherein the support includes at least one bracket for mounting the accessory to a vertical surface.

24. The accessory of Claim 19, wherein the means for removably coupling the conductive surface to a wireless device include an arm that is shaped to clip to an antenna of a wireless device.

25. The accessory of Claim 19, wherein the means for removably coupling the conductive surface to a wireless device include a bracket having a shape adapted to receive and connect to a housing of a wireless device.

26. The accessory of Claim 19, wherein the conductive surface is sized and shaped to reflect wireless signals relative to both an internal antenna and an external antenna of a wireless device.

27. The accessory of Claim 19, wherein the conductive surface comprises a metallic layer on the support.